Electronic government and good governance in Iran

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In this article we try to describe the problem and its importance as well as the literature on electronic government and good governance. In this study, issues like the background and electronic government and good governance related definitions, introducing electronic factors, comparing bureaucratic governance with electronic government as well as familiarity with new networked (connected governance) term by UN (2008) are applied and the relationship between electronic government and good governance is clarified. In another section which shapes the kernel of the article, the methodology of the article is explained so that assumptions, methodology, statistical community and case studies are all expressed and the findings are analyzed by descriptive/deductive methods in the format of analytical tables and exhibits. Finally, the discussion is concluded by considering the results of statistical tests.

Key words: Bureaucratic governance, e-government, e-governance, connected governance, e-service, good governance.

INTRODUCTION

At the dawning of the 21st century, e-government applications stand poised to transform governmental Communication, although their operational potential remains largely unfilled. Scholars suggest that the online “Intermedia” modality—as a hybrid of multiple communication technologies can facilitate government communication functions more rapidly, efficiently and cheaply than offline vehicles. Yet the transition from policy formulation to implementation still eludes many developing nations, underscoring that e-government is a very complex socio-technical system, highly dependent upon overall institutional maturity, regulatory/policy frameworks, and socio-cultural considerations (Lan et al., 2008: 89).

E-Government refers to the process of connecting citizens digitally to their government in order that they might access information and services offered by government agencies. Nations have traditionally relied on telephone networks to fulfill similar telecommunication functions (Lan et al., 2008: 89).

Web-based technologies offer governments more efficient and effective means than traditional physical channels to better serve their citizens. The non-hierarchical nature of the Internet, and its ability to speed communication with 24 h, 7-days-a-week access offers real potential to improve interaction.

Yet the transition from using the Internet as a communication to an interaction channel is not only resource intensive, but requires changes in organizational practices, key value chain activities, and strategic partnerships (Janssen et al., 2008: 203). E-government is not about the use of technology or technological innovation for its own sake. The focus is placed on improving public services and the way government organizations work internally (Gunter, 2006:362).

In this study, issues like the background and electronic government and good governance related definitions, introducing electronic factors, comparing bureaucratic governance with electronic government as well as familiarity with new networked (connected governance) term by UNDP (2008) are applied and the relationship between
Table 1. The practical concept of e-government's aspects.

<table>
<thead>
<tr>
<th>Practical concept</th>
<th>Aspects</th>
</tr>
</thead>
<tbody>
<tr>
<td>The all affairs and service and informative transactions between government and citizens.</td>
<td>Government to citizen (G2C)</td>
</tr>
<tr>
<td>The all affairs and service and informative transactions between government and business and occupations.</td>
<td>Government to business (G2B)</td>
</tr>
<tr>
<td>The all affairs and service and informative transactions between government and public affairs and employees.</td>
<td>Government to employees (G2E)</td>
</tr>
<tr>
<td>The all affairs and service and informative transactions between government and government and other governmental organizations.</td>
<td>Government to government (G2G)</td>
</tr>
<tr>
<td>The all affairs and service and informative transactions between government and civil communities, organizations and NGOs.</td>
<td>Government to civil community (G2CC)</td>
</tr>
<tr>
<td>The all affairs and service and informative transactions between government and immigrants.</td>
<td>Government to immigrants (G2I)</td>
</tr>
</tbody>
</table>


With consideration of different researcher's opinions is presented Table1. Figure 1 shows the objective and activities (that is, potential projects or functionality) for each of the areas.

**LITERATURE REVIEW**

**Aspects of e-government**

E-government is dealing with different group in society and it is at the service of citizens, businesses, private organizations, employees, public organizations and someone who are willing to migrate by electronic nets (Layne and Lee, 2001: 235). The aspects of e-government are divided to below categories by Lam (2005):

i. Government agency-to-government agency (GA-2-GA), which represents the relationship between two government agencies collaborating to achieve a shared E-government goal.

ii. Central government-to-government agency (CG-2-GA), which represents the relationship between a central coordinating or consultative body, such as the UK’s office of the e-Envoy, and other government agencies.

iii. Government agency-to-government user (GA-2-GU), which represents the relationship between government agencies and end-users of government services such as citizens and businesses (Lam, 2005: 522).

Electronic government and good governance is clarified. In another section which shapes the kernel of the article, the methodology of the article is explained so that assumptions, methodology, statistical community and case studies are all expressed and the findings are analyzed by descriptive/deductive methods in the format of analytical tables and exhibits. Finally, the discussion is concluded by considering the results of statistical tests.

With consideration of different researcher's opinions is presented Table1. Figure 1 shows the objective and activities (that is, potential projects or functionality) for each of the areas.

**The second generation e-government paradigm**

One of the hallmarks of the Internet is its power to bring together, integrate, and equalize. E-government, in particular, is also about the horizontal integration of the various parts of government to create a user-friendly, one stop government point of access. The main goals of e-government initiatives are to make it more convenient for citizens to obtain services and to interact with the government, to improve government efficiency and effectiveness through e-government, and to improve government responsiveness to citizens (Jaeger, 2002: 359).

The e-government is a means that aims to relax the citizens' interface with overcomplicated and slow processes of local and regional governmental organizations (Votis et al., 2008: 132). To meet these goals, e-government will have to promote the horizontal and vertical integration of the branches of government (Jaeger, 2002: 359).

In the field of electronic government scholars often use "service typologies" when studying and explaining how and why governments interact with citizens. However, the term service has many different definitions: A number of which are listed as follows;

i. Kotler (2000): Any act or performance that one party can offer to another that is essentially intangible and does not result in the ownership of anything. Its production
may or may not be tied to a physical product.
iii. Ramaswamy (1996): The business transactions that take place between a donor (service provider) and receiver (customer) in order to produce an outcome that satisfies the customer. (Ebbers et al., 2008: 183).
iv. A service is commonly defined as the non-material equivalent of a good (Bygstad and Lanested, 2008: 2).

The emerging ICT-for-development approach towards public sector transformation is creating new perceptions about government and governance. The twin objective of achieving further improvements in service delivery and efficacy in government functioning is bringing about a rethinking of the role of ICT. Governments are increasingly looking towards e-government-as-a-whole concept which focuses on the provision of services at the front-end, supported by integration, consolidation and innovation in back-end processes and systems to achieve maximum cost savings and improved service delivery (UNDP, 2008: 3).

Within the ambit of the whole-of-government approach, the focus of the second generation e-government initiatives has shifted from the provision of services to the use of ICTs to increase the value of services. As Figure 2 indicates the approach to public sector service delivery
has evolved over time from the traditional model of government dispensing services via traditional modes to an emphasis on e-government and e-services per se, to an integrated approach for enhancing the value of services to the citizen. In many countries around the world, public sector development strategies are being revisited to address the question: how can the value of the public services enhance? (UNDP, 2008: 4).

From e-government to connected governance: A framework

Advances in technology have ushered in an era of new thinking about increasing integration in service delivery based on commonality of infrastructures, data and business processes. The focus on strengthening the interlink ages between e-government and connected government is forming the underpinnings of the new e-government strategies in many developed countries. In many countries the cornerstone of the e-government strategy is becoming service innovation achieved by moving to multi channel service delivery and a better use of back-end processes and systems. This is creating a drive towards more collaborative models of service delivery that can be referred to as connected government or networked government. One of the diktats of this new paradigm is that government agencies rethink their operations to move from being system-oriented to chain-oriented with respect to their structure, functioning, skills and capabilities, and culture and management (UNDP, 2008:5).

Connected or networked governance involves the governmental promotion of collective action to advance the public good, by engaging the creative efforts of all of society. It is about influencing the strategic actions of other stakeholders. ICT-based connected governance efforts are aimed at an improved cooperation between governmental agencies, allowing for an enhanced, active and effective consultation and engagement with citizens, and a greater involvement with multi-stakeholders regionally and internationally (UNDP, 2008: 6).

Evolution of model of e-government

The paper can classify the models of e-Government into four areas: Bureaucracy Model e-Government, Information Management Model e-Government, Citizen Participation Model e-Government, and Governance Model e-Government. In fact, the model has been evolved from Bureaucracy Model e-Government to Governance Model. Social diversity and maturity are significant factors of the evolution. E-Government is therefore not a product of technology but a product of society, culture, and politics. Here are the four models of e-government. First, Bureaucracy Model e-Government: The main policy goal of Bureaucracy Model e-Government is to focus on efficient administrative functions with respect to internal government structure and individual public officer. Its model occurs in the environment where the civil society has not matured. As a result, the degree of citizen’s participation in government decision-making process is very low. Second, Information Management Model e-Government: There would be a linkage between citizens and government in terms of electronic public service. Still there are no significant inputs to the government decision-making process, because the degree of civil society has been weakened. Thirdly, Citizen Participation Model e-Government: There are positive and strong citizen’s participations to government decision-making process through two-way interactions. It starts to put little emphasis on democracy and transparency by using information technology. However, there are many services available through the Internet or information technology application. In this model, the degree of civil society has matured. Finally, Governance Model e-Government: Various civil groups and citizens actively participate in all of government decision making process and express their opinions through the Internet. All of political and administrative activities have a place in the field of e-Government. Naturally, strong democratic and transparent processes have been emphasized. There are multiple transactions through the networking between social entities. No doubt, the degree of civil society has strongly matured. In sum, Figure 3 captures some dimension how the models of e-government have been evolved. There are two clear criteria such as social diversity and civil society, representing the development of society (Kim, 2007:8).

Based on these four models, the situation of e-government policy initiated by each government could be analyzed. Generally, it is assumed that Bureaucracy Model e-Government and Information Management Model e-Government can be found in less and developing countries. Otherwise, developed countries have evolved into Citizen Participation Model and Governance Model e-Government. These models and assumptions should be further examined through international empirical studies. Table 2 shows the criteria of these four models.

In the models, it should be understood that the evolution of e-government models are strongly associated with degrees of variety and maturity of civil society. Society process itself, as a very important environment of government process, is inevitable. In addition, the degree of civil society has changed these three relationships among citizen, government, and business. It should be recognized that the degree of civil society has played important roles towards a more democratic and transparent government system. Naturally it applies to the evolution of e-Government. It is also associated with administrative ideology from efficiency to democracy (Kim, 2007: 9).
Table 2. Criteria of each model of e-Government (Kim, 2007: 10)

<table>
<thead>
<tr>
<th>Criteria model</th>
<th>Area</th>
<th>Ideology</th>
<th>Participation</th>
<th>Maturity of civil society</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bureaucracy model</td>
<td>Bureaucratic organization and public servant</td>
<td>Efficiency of inside government</td>
<td>Very low</td>
<td>Very low</td>
</tr>
<tr>
<td>Information management model</td>
<td>Government to citizen on limited public service</td>
<td>Efficient linkage between citizen and government</td>
<td>Low</td>
<td>Low</td>
</tr>
<tr>
<td>Citizen participation model</td>
<td>Public participation to all governmental services on two-interaction</td>
<td>Civil participation and weak democracy and transparency</td>
<td>Middle, two-way interaction</td>
<td>High</td>
</tr>
<tr>
<td>Governance model</td>
<td>All participations and democratic participation</td>
<td>Strong democracy and transparency</td>
<td>Strong</td>
<td>Very high</td>
</tr>
</tbody>
</table>

Principles of good governance

‘Good governance’ is a nebulous term that has come to assume very different meanings. Its importance, however, is commonly asserted in development studies (Chiu and Hung, 2004: 396). Good governance has become a ‘keyword’ within development and foreign policy circles (Fennell et al., 2008:63; Rajkummar, Swaroop, 2008:96; Sachiko and Zaelke, 2007; Kakonge, 1998:295; Sharma, 2007:35; Harman, 2006: 5; Sexena, 2005: 500; Roberts et al., 2007: 967). Good governance, for which there are many competing definitions, signals ‘presences’ of the rule of law, of stability, of financial transparency, accountable state officials, of human rights, of a free media, (Roberts et al., 2007: 967), participatory, consensus oriented, responsive, effective and efficient, equitable and inclusive and follows the rule of law (UNDP, 2005: 47-48).

Good governance is often paired with ‘democracy,’ another keyword in the contemporary lexicon, and while the opprobrium attached to bad governance is directed most often at the state, good governance is assumed to involve not only a reformed state but also civil society and capital (Roberts et al., 2007: 967). Good governance is the term that symbolizes the paradigm shift of the role of governments.

Moreover, governance is not only about the ‘organs’ or actors. More importantly, it is about the quality of governance, which expresses itself through elements and dimensions (Abdellatif, 2003: 3), which will be listed in
this study.

**Good governance standard for public services**

The good governance standards in public services were published through a statement by the independent commission for good governance in public services with the Chartered Institute of Public Finance and Accountancy (CIPFA) and Office of Public Management (OPM) in London in 2004.

The content of the aforesaid statement and the subsequent principles have been used in the case of good governance evaluation in organizations. These are observable in Figure 4.

Good governance means focusing on the organization's purpose and on outcomes or citizens and service users. (Result-Oriented)

The function of governance is to ensure that an organization or partnership fulfills its overall purpose, achieves its intended outcomes for citizens and service users, and operates in an effective, efficient and ethical manner. This principle should guide all governance activity. Each organization has its own purpose. There are also some general purposes that are fundamental to all public governance, including providing good quality services and achieving value for money. The concept of 'public value' can be helpful when thinking about the unique purpose of public services and therefore of their governance. Public value refers to the things that public services produce, either directly or indirectly, using public money. Public value includes: outcomes (such as improved health and improved safety); services (such as primary care services and policing); and trust in public governance (OPM and CIPFA, 2004:7).

i. Being clear about the organization's purpose and its intended outcomes for citizens and service users

ii. Making sure those users receive a high quality service

iii. Making sure that taxpayers receive value for money (OPM and CIPFA, 2004:8)

**Good governance means performing effectively in clearly defined functions and roles** (effectiveness of roles and
tasks)

Good governance requires all concerned to be clear about the functions of governance and their own roles and responsibilities and those of others, and to behave in ways that are consistent with those roles. Being clear about one’s own role, and how it relates to that of others, increases the chance of performing the role well. Clarity about roles also helps all stakeholders to understand how the governance system works and who is accountable for what (OPM and CIPFA, 2004: 9).

i. Being clear about the functions of the governing body
ii. Being clear about the responsibilities of non-executives and the executive, and making sure that those responsibilities are carried out
iii. Being clear about relationships between governors and the public (OPM and CIPFA, 2004: 9-11).

Good governance means promoting values for the whole organization and demonstrating the values of good governance through behavior (enhancing of values)

Good governance flows from a shared ethos or culture, as well as from systems and structures. It cannot be reduced to a set of rules, or achieved fully by compliance with a set of requirements. This spirit or ethos of good governance can be expressed as values and demonstrated in behavior. Good governance builds on the seven principles for the conduct of people in public life that were established by the Committee on Standards in Public Life. Known as the Nolan principles, these are: selflessness, integrity, objectivity, accountability, openness, honesty and leadership (OPM and CIPFA, 2004: 13).

i. Putting organizational values into practice
ii. Individual governors behaving in ways that uphold and exemplify effective governance (OPM and CIPFA, 2004: 13-14).

Good governance means taking informed, transparent decisions and managing risk (transparency-making).

Decision making in governance is complex and challenging. It must further the organization’s purpose and strategic direction and be robust in the medium and longer terms. To make such decisions, governors must be well informed. Governors making decisions need the support of appropriate systems, to help to ensure that decisions are implemented and that resources are used legally and efficiently. A governing body may, for example, adopt the discipline of formally reviewing implementation of a new policy after a defined initial period, to see whether it is working as intended. Risk management is important to the successful delivery of public services. An effective risk management system identifies and assesses risks, decides on appropriate responses and then provides assurance that the chosen responses are effective (OPM and CIPFA, 2004: 15).

i. Being rigorous and transparent about how decisions are taken
ii. Having and using good quality information, advice and support
iii. Making sure that an effective risk management system is in operation (OPM and CIPFA, 2004: 15-16).

Good governance means developing the capacity and capability of the governing body to be effective (capacity-making).

Public service organizations need people with the right skills to direct and control them effectively. Governing bodies should consider the skills that they need for their particular situation. To increase their chances of finding these people and to enrich governance deliberations by bringing together a group of people with different backgrounds governing bodies need to recruit governors from different parts of society. Public trust and confidence in governance will increase if governance is not only done well, but is done by a diverse group of people who reflect the community. Governance is also likely to be more effective and dynamic if new people with new ideas are appointed regularly, but this needs to be balanced with the need for stability to provide continuity of knowledge and relationships (OPM and CIPFA, 2004: 19).

i. Making sure that appointed and elected governors have the skills, knowledge and experience they need to perform well
ii. Developing the capability of people with governance responsibilities and evaluating their performance, as individuals and as a group
iii. 1.7.5.3 Striking a balance, in the membership of the governing body, between continuity and renewal (OPM and CIPFA, 2004: 20-21).

Good governance means engaging stakeholders and making accountability real (Accountability.)

Governing bodies of public services have multiple accountabilities: to the public (citizens) and to those who have the authority, and responsibility, to hold them to account on the public’s behalf. These include: commissioners of services, Parliament, ministers, government departments and regulators. Real accountability requires a relationship and a dialogue. The Public Services Productivity Panel said that accountability involves an agreed process for both giving an account of your actions and being held to account; a systematic approach to put that process into operation; and a focus on explicit results or outcomes. Real accountability is concerned not only with reporting on or discussing actions already completed, but also with engaging with stakeholders to understand and respond to their views as the organization plans and carries out its activities (OPM and CIPFA, 2004: 23).

i. Understanding formal and informal accountability relationships
ii. Taking an active and planned approach to dialogue with and accountability to the public
iii. Taking an active and planned approach to responsibility to staff

E-government and good governance

Since the mid-1990s, governments around the world initiated an innovation which utilized the internet and other advanced computer technologies to improve their governing process (Siau and Long, 2005: 443). Governments worldwide are increasingly using the Internet to provide public services to their constituents (Janssen et al., 2008: 202). Within the public sector, the utilization of Information and Communication Technology (ICT) has been well regarded as an indispensable component in reinventing the government. In particular, it has been highlighted that ICT possessed the catalytic property to transform the capability of governments in serving their citizens. Some of the transformative improvements that have been touted to be a result of ICT applications include increasing customer focus, enhancing efficiency, improving effectiveness, and reducing bureaucracy. In view of this, it is unsurprising that many governments in both the developed and developing countries have committed billions of dollars to various e-government initiatives (Chan et al., 2008: 240,241).

The emergence of the new information and communication technologies has all the attributes of imparting added value to the processes that give identity, form and relationships that characterize Good Governance (Okot-Umao, 2001:3). Since its emergence approximately 15 years ago, e-government is increasingly being seen as an influential driver in supporting the development of Less Developed Countries (LDCs). Furthermore, many international organizations regard e-government as being a driver for good governance in LDCs, and fund e-government projects in LDCs accordingly (Hesse, 2007: 29). In particular, some Governments have seized upon the opportunities offered by the new and emerging information and communication technologies to transform government, democracy, government-related transactions as well as the embedding society, both economically and socially. Others have yet to begin to appreciate the impact of the new information and communication technologies. They have continued to depend on the traditional ways of creating wealth and providing services. Governments and other governance structures particularly the private sector share the responsibility for the evolution of the new digital society and the knowledge economy through focusing on people-centered development. Despite the trend toward privatization and a decreasing size of the public sector, governments continue to be the single most significant force to influence the future in this area. Governments set and promulgate policies and are collectively the major spender on information and communications technologies and services. Moreover, they are a major producer or potential producer of content and of innovation (Okot-Umao, 2001:3).

ICT can influence governance processes in three possible ways:

i. Technical role — automation of repetitive governance tasks and thereby improving efficiency of governance processes. For instance, automated filing of tax forms e-voting, periodic information reporting, and etc.

ii. Supportive role — use of ICT to complement existing efforts and processes to improve governance. For instance, use of the Internet to catalyst existing efforts towards transparency in government information and functioning, or embedding use of emails in connecting decision-makers with their constituencies.

iii. Innovative role — use of ICT to initiate new governance services or new mechanisms for improved service delivery, which would be impossible through non-ICT modes. For instance: online checking of the status of an application (from remote and beyond office hours); providing instant access to the same information to all individuals through emails and website; ability to instantly access, compare or triangulate information from outside of the constituency or government sources, etc (Ashrafologhalaei, 2005: 3).

E-government is a key method for achieving many goals. E-government is used in many public administrations to deliver improved or new services to their clients. This work is becoming increasingly important for administrations and their commercial partners, as well as in the academic world. The importance and application of e-governments and the proposed e-government’s strategic vision can be summarized as:

1. Build services around increasing choice for the citizen
2. Make government and its services more accessible
3. Ensure social inclusion
4. Use information better
5. Citizen-centered, not bureaucracy-centered
6. Result-centered and

As it is understandable in accordance with the said lines, the effective role of e-government on governance and specially the establishment of good governance can be observed. Now the goals of e-government are considered and it will be observed how these goals will cover the principles of good governance.

These goals are classified into individual, societal, organizational, or political (Table 3). This classification
helps to better understand the goals of e-government and formulate strategies for e-government initiatives. For instance, four types of strategies may be proposed based on this classification: individually focused (increasing accessibility of government services to individuals), society focused (better utilization of society’s scarce resources), organizationally focused (empowering organizational members), and politically focused (enhancing governmental accountability). The classification in Table 3 provides a heuristic device for better organization of e-government goals (Nour et al., 2007: 4).

E-government, or e-governance, is nothing more or less than the application of information technology to improve the quality and efficiency of the performance of governance tasks (Gordon, 2006: 4). E-government is the central ring of linking the strategy, process, organization, and technology so as to provide effective procedures for interest groups to perform in a timely manner and make more information available (Sharifi and Zarei, 2004: 601).

E-government enables the public sector to maintain and strengthen good governance in the knowledge society. This means:

1. A public sector that is open and transparent: governments that are understandable and accountable to the citizens, open to democratic involvement and scrutiny.
2. A public sector that is at the service of all. A user-centered public sector will be inclusive, that is, will exclude no one from its services and respect everyone as individuals by providing personalized services.
3. A productive public sector that delivers maximum value for taxpayers’ money. It implies that less time is wasted standing in queues, errors are drastically reduced, more time is available for professional face-to-face service, and the jobs of civil servants can become more rewarding.

In short, e-government is helping to establish a more open, inclusive and productive public sector, in line with good governance. This is the pre-condition for a public sector that is prepared for the future (CEC, 2003: 10).

### METHODOLOGY

A method was designed to achieve certain goals which are divided into main and minor goals in this research. The main goal is to study the relationship between the tendency of having an electronic government and the traits of good governance in Yazd public management system, while the minor goals are to:

(i) Study the rate of promoting the traits of good governance by considering the amount of tendency toward electronic government in Yazd public management system; 
(ii) Study the tendency of Yazd public organizations to electronic government; and 
(iii) Prioritize Yazd public organizations by considering the indicators of good governance.

#### Research conceptual model

To design research hypotheses, any researcher needs a conceptual model to identify the variables in these hypotheses, the relations among such hypotheses as well as their conceptual and operational definitions. On this basis and based on the indicators of readiness of electronic government in the organizations which designed and analyzed by Torres et al. (2005) in EU organizations in 2005 and to identify the criteria of good governance in minor level (organizational level), an article published by The Independent Commission on Good Governance in Public Services, Office for Public Management Ltd and The Chartered Institutes of Public Finance and Accountancy in London (2004) were utilized and the researches used these studies as the basis of its discussion about the indicators of good governance indicators in public organizations. Main hypothesis is the relationship between tendency to electronic government and the traits of good governance in Yazd public management system and Sub hypotheses are:

i. There is a relationship between tendency to electronic government and the result-orientation in Yazd public management system.

ii. There is a relationship between tendency to electronic

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1. Torres L, Vicente P, Royo S (2005), "E-Government and The Transformation of Public Administrations in EU Countries, Beyond NPM or Just a Second Wave of Reforms?".

government and the effectiveness of roles and tasks in Yazd public management system.

iii. There is a relationship between tendency to electronic government and enhancing the values in Yazd public management system.

iv. There is a relationship between tendency to electronic government and transparency-making in Yazd public management system.

v. There is a relationship between tendency to electronic government and capacity-making in Yazd public management system.

vi. There is a relationship between tendency to electronic government and accountability in Yazd public management system.

In this research, descriptive method is used and to clarify and explain the situation of research variables and needed data collection, survey method is applied. In the meantime, an integrated questionnaire of such resources is used and the cultural conditions of national organizations are considered. The validity of tests and questionnaire was 0.957 by using Cronbach’s alpha.

### Statistical community

Regarding the specialty, wideness and dispersion of the issue, it was decided that the statistical community to selected form managers and employees in seven Yazd public administration including Governor General’s Office, Telecommunication Company, Labor and Social Affairs, Culture and Islamic Guidance, Agricultural Jihad, Trading, and Industry and Mines.

Since the designed questionnaire should be distributed among managers and employees and the number of our target personnel in the organizations were 736 individuals and also owing to the fact that we were going to study the relationship between two variables in this research, the volume of the sample was computed by following formula (Dell, Holleran, and Ramakrishnan, 2002: 213):

\[
    n = \frac{4C}{\ln \left( \frac{1 + r \times (1 - r_0)}{1 - r} \right)^2}
\]

(1)

In this formula, C is calculated by using the following table:
(Dell, Holleran, and Ramakrishnan, 2002: 12)

<table>
<thead>
<tr>
<th>( \alpha )</th>
<th>0.05</th>
<th>0.01</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-( \beta )</td>
<td>7.85</td>
<td>11.68</td>
</tr>
<tr>
<td>0.9</td>
<td>0.51</td>
<td>14.88</td>
</tr>
</tbody>
</table>

Since the confidential level is 95% and its square is 0.8 in this research, C is calculated as 7.85 as shown in Table 3. The rate of (r) in formula (1) was calculated based on the lowest coefficient correlation between dependent and independent variables in the pre-test sample (35 individuals), which was determined as 0.21 based on Table 2 in attachment 3. Moreover, it should be noted that the amount of \( r_0 \) is zero. The volume of the sample is calculated as 175 individuals by formula (1). Since there is the possibility of questionnaire dropping in any field study, the researcher decided to increase the volume of sample to 200 individuals.

The research is performed in aforementioned seven organizations (place scope) to study the relationship between electronic government and the traits of good governance in Yazd public management system (thematic scope). Initial studies were begun in January 2008 and the data were gathered and analyzed in first two months during summer 2008 (time scope).

The data was collected from sample by questionnaire and then Spearman and Freedman tests run in statistical package for social sciences (SPSS) software. The Spearman's correlation test shows relationship between government and traits of good governance in Yazd public management system. Based on the Freedman's test findings regarding the items for good governance and there is a significant difference between the minimum means of both variables.

### DATA ANALYSIS

It is initially tried in the section to define the situation of all main and minor variables by using statistical community and then the position of the community is explained and clarified by considering the axes and factors in good governance. Then, all hypotheses are analyzed by considering research data and statistical tests.

As shown in Table 6, the mean of variables fluctuate from 1.9 to 2.7. Regarding electronic government variable, the highest mean of electronic government relates to Telecommunication Company namely 2.7 and the highest one relates to Labor and Social Affairs Organization namely 1.69. On the other hand, the highest mean of good governance relates to Trading Organization namely 2.53 and the lowest one relates to Culture and Islamic Guidance namely 1.91. Overall, the total average of electronic government in all organizations was 2.35 and the total average of good governance was 2.27 which show an unsuitable condition. In Table 6, the ratings of all organizations are shown based on two electronic...
Testing the hypotheses by using Spearman's correlation test

By using Spearman's correlation test, the hypotheses (main and sub) in the studied community were examined with 95% confidential level; as a result, $H_0$ was rejected and its contradictory hypothesis was supported. It means that there is a significant relationship between tendency to electronic government and traits of good governance in Yazd public management system. In other words, enhancing the tendency to electronic government in the organizations improve good governance. In following table, the relationship between all items and their coefficient correlation are shown in Table 5.

Findings of Freedman's test

Based on the Freedman's test findings regarding the items for good governance and with 95% confidential level, $P$-Value = 0.00 and < 0.01. Therefore, $H_0$ is refused. In other word, there is a significant difference between the minimum means of both variables.

Again, by using Freedman's test between three values promotion, responsiveness and result-orientation variables as well as three variables like the efficiency of the roles and tasks, capacity-making and transparency-making, it was found that that there is no significant difference between the means of three variables on higher part of the table and other three variables in the lower of the table.

1. Values promotion, responsiveness and result-orientation variables are equal in terms of importance and one can observe no significant difference between them.

2. The efficiency of the roles and tasks, capacity-making and transparency-making variables are equal in terms of importance and one can observe no significant difference between them.

General finding

As a general conclusion, one can say that with 5% error
level, the importance of good governance variables in mentioned seven organizations are as follow:

1st level: it includes values promotion, responsiveness and result-orientation variables.
2nd level: it includes the efficiency of the roles and tasks, capacity-making and transparency-making variables.

DISCUSSION

Utilizing IT by public sector to provide services to the society which is called electronic government is a new initiative which plans to make it possible for citizen to access general service via electronic media. So, the relations between public management and electronic media should be planned in a new manner as Jaeger (2003) opined that the main goals of E-government initiatives are to make it more convenient for citizens to obtain services and interact with the government, in order to improve government efficiency and effectiveness through E-government, and to improve government responsiveness to citizens. Tendency toward electronic government and providing general service to people via electronic media started when public management understood the importance of IT in macro structure of the society and its surprising capabilities. Afterwards, with the aim of meeting citizens' ever-changing needs and demands, the agents in general sector decided to use IT in order to reform public organizations and change the method of providing general services fundamentally.

The relationship between electronic government and good governance is too close that some connoisseurs believe that electronic government has not completed its mission if it is not finally resulted into good governance. Electronic government is a method to assure that all citizens have equal opportunity in their decisions that influence over their situation and the quality of their life. This new form of governance will change inactive public services to active players and they can express their needed services.

Electronic government provides broad facilities for achievement of good governance ideals and helps this process by utilizing new technologies, providing services in general sector, accelerating services to citizens, more responsiveness of governmental officers, transparent information, decreasing the distance between people and authorities, effective contribution of citizens and civil society members in general decision-making process, expanding social justice through equal opportunities for individuals' access to information. Governments should be equipped with powerful tools like electronic government if they tend to move forward in good governance.

RECOMMENDATIONS

Regarding the resultants of the research, increase in tendency to electronic government in organizations, soars the traits of good governance. This paper is a practical paper and the first of its kind about how e-government is related to good governance in Iran; as such, we try to present solutions for some problems as follow:

i. Owing to the fact that the overall mean of result-orientation variable is 2.33, it is not in a favorable position in mentioned organizations. Since one of the aspects to enhance result-orientation variable is electronic government, it is suggested to increase the index rate of electronic government and the method of providing the services in organizations electronically. E-government is not about the use of technology or technological innovation for its own sake. The focus is placed on improving public services and the way government organizations work internally (Gunter, 2006: 362).

ii. On the other hand, the overall mean of the efficiency of roles and tasks is 2.24, so it is not in a favorable position in mentioned organizations. Since one of the aspects to enhance efficiency of roles and tasks variable is electronic government, it is suggested to increase the index rate of electronic government and the method of providing the services in organizations electronically.

iii. Regarding value promotion variable, it is observed that the overall mean of such variable is 2.37, so it is not in a favorable position in mentioned organizations. Since one of the aspects to enhance value promotion variable is electronic government, it is suggested to increase the index rate of electronic government and the method of providing the services in organizations electronically.

iv. Governors, making decisions, need the support of appropriate systems to help ensure that decisions are implemented and that resources are used legally and efficiently. A governing body may, for example, adopt the discipline of formally reviewing implementation of a new policy after a defined initial period, to see whether or not it is working as intended. Since the overall mean of transparency-making variable is 2.16, it is not in a favorable position in mentioned organizations.

v. On the other hand, the overall mean of capacity-making is 2.20, so it is not in a favorable position in mentioned organizations. Since one of the aspects to enhance capacity-making variable is electronic government, it is suggested to increase the index rate of electronic government and the method of providing the services in organizations electronically.

vi. The main goals of e-government initiatives are to make governance more convenient for citizens to obtain services and to interact with the government, to improve government efficiency and effectiveness through e-government, and to improve government responsiveness to citizens (Jaeger, 2002: 359). Regarding
responsiveness variable, it is observed that the overall mean of such variable is 2.32, so it is not in a favorable position in mentioned organizations. Since one of the aspects to enhance responsiveness variable is electronic government, it is suggested to increase the index rate of electronic government and the method of providing the services in organizations electronically.

vi. E-government helps to establish a more open, inclusive and productive public sector, in line with good governance. This is the pre-condition for a public sector that is prepared for the future (CEC, 2003: 10). Finally, owing to the fact that the overall mean of good governance in all organizations is 2.27 which is not a favorable position and with regard to the fact that one of the aspects to enhance indicators of good governance in organizations is tendency toward electronic government, it is suggested that mentioned organizations provide necessary and appropriate mechanisms to enhance tendency and indicators of electronic government as well as necessary grounds to implement electronic services in their own departments.

Since electronic government is seriously depended on web-based technologies especially communication technologies and IT, initially necessary and sufficient infrastructures in ICT should be institutionalized in organizations. In this line, it needs sufficient investments to achieve this aim. Necessary infrastructures include expanding local networks, Intranet, Extranet and Internet.

On the one hand, a department titled "E-government" should be established as an independent and professional sector which responds organizational needs and necessities in developing infrastructures and electronic services. By a scientific and professional manner, such department should benchmark the needs of both internal customers and external customers and should provide proper services and pattern to do its processes electronically based on the requests and current situation as well as its facilities and updated information. On the other hand, investment in infrastructures of developing electronic services and e-government is only a hardware aspect. Another aspect merits high attention, is software aspect. Software aspect includes training the employees in order to apply web-based technologies. In the meantime, organization should have some plans to train citizens in order to utilize electronic services. Another important issues is informing the citizens about using electronic services. Although the organization may have a high rank in terms of electronic government index, its customers and target groups are deprived electronic services because of weakness in informing them.

REFERENCES


OPM, CIPFA (2004). The Good Governance Standard for Public Services. The Independent Commission on Good Governance in Public Services, Office for Public Management Ltd and the Chartered Institutes of Public Finance and Accountancy, Printed by Hackney Ltd.


